

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 6. (canceled)

7. (new) A rotation rate sensor, comprising:

a vibrational gyroscope having a natural frequency and connected in at least one control loop, said at least one control loop supplying an excitation signal at the natural frequency of said vibrational gyroscope, said vibrational gyroscope generating an output signal, said at least one control loop deriving a noisy rotation rate signal from said output signal;

a low pass filter having a control input, a controllable bandwidth being controllable in response to a signal at said control input, and an input connected for receiving the noisy rotation rate signal;

a bandpass filter having an input connected for receiving the noisy rotation rate signal and an output; and

a threshold value circuit having an input connected to said bandpass filter output and an output connected to said low pass filter control input such that the bandpass filter output is connected to said low pass filter control input through said threshold value circuit.

8. (new) The rotation rate sensor of claim 7, further comprising a band selector connected between said threshold value circuit and said lowpass filter control input, said band

selector responding to a transition in an output signal from the threshold value circuit by generating a gradual transition in the signal fed to said lowpass filter control circuit.

9. (new) The rotation rate sensor of claim 7, wherein changes in the rotation rate signal allowed to pass through said bandpass filter are faster than changes which are allowed to pass through said lowpass filter, at least when the controllable bandwidth is set to a minimum value, and the changes in the rotation rate signal allowed to pass through said bandpass filter are at most as fast as the fastest changes caused by rotation of the vibrational gyroscope.

10. (new) The rotation rate sensor of claim 7, wherein said threshold value circuit selectively adopts one of at least first and second levels, said first level being adopted when an absolute value of bandpass filter output signal is below a threshold value.

11. (new) The rotation rate sensor of claim 7, wherein said bandpass filter and said threshold value circuit are arranged so that band limits of said bandpass filter and threshold values of said circuit are programmable.

12. (new) The rotation rate sensor of claim 7, wherein said lowpass filter is arranged so that each of limits of the controllable bandwidth of said lowpass filter, a transition time from the lowest to the highest of the limits, and a transition time from the highest to the lowest of the limits are programmable.